## ABSTRACT OF THE DISCLOSURE

A method for heat treating at least one workpiece, such as a coated turbine engine component, is provided. The method comprises the steps of cleaning a furnace to be used during the heat treating method, which cleaning method comprising injecting a gas at a workpiece center location and applying heat, and diffusion heat treating the at least one workpiece in a gas atmosphere with the gas being injected at the workpiece center location. After the diffusion heat treatment step, the coated workpiece(s) may be subjected to a surface finishing operation such as a peening operation.